

**Translation**

**PATENT COOPERATION TREATY**

PCT/JP2003/012253



**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>7FG36480-PCT</b>	<b>FOR FURTHER ACTION</b> See Form PCT/IPEA/416	
International application No. <b>PCT/JP2003/012253</b>	International filing date (day/month/year) <b>25 September 2003 (25.09.2003)</b>	Priority date (day/month/year) <b>26 September 2002 (26.09.2002)</b>
International Patent Classification (IPC) or national classification and IPC <b>G06F 17/50</b>		
Applicant <b>KABUSHIKI KAISHA TOSHIBA</b>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
  - a. ☐ (sent to the applicant and to the International Bureau) a total of \_\_\_\_\_ sheets, as follows:
    - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
    - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
  - b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) \_\_\_\_\_, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- ☒ Box No. I Basis of the report
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand <b>10 March 2004 (10.03.2004)</b>	Date of completion of this report <b>14 July 2004 (14.07.2004)</b>
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/012253

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ The international application as originally filed/furnished
- ☐ the description:
- pages \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the claims:
- pages \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_, as amended (together with any statement) under Article 19
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the drawings:
- pages \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/JP 03/12253

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	4-18, 20, 22	YES
	Claims	1-3, 19, 21	NO
Inventive step (IS)	Claims		YES
	Claims	1-22	NO
Industrial applicability (IA)	Claims	1-22	YES
	Claims		NO

### 2. Citations and explanations

- Document 1: JP 06-309418 A (Hitachi, Ltd.), 04 November 1994, column 24, line 22 to column 25, line 1 and fig. 6, 10 and 15
- Document 2: JP 2000-268066 A (Hitachi Seibu Software Kabushiki Kaisha), 29 September 2000, column 13, lines 18-34
- Document 3: JP 2000-331065 A (Hitachi, Ltd.), 30 November 2000, entire text, all drawings
- Document 4: JP 2000-305973 A (Matsushita Electric Works, Ltd.), 02 November 2000, column 36, line 42 to column 38, line 20 and fig. 39-43
- Document 5: JP 09-171519 A (Nippon Telegraph and Telephone Corporation), 30 June 1997, column 15, lines 16-41 and fig. 5 and 24-27
- Document 6: JP 11-338702 A (Toshiba Corp.), 10 December 1999, column 68, line 12 to column 69, line 10
- Document 7: JP 05-334316 A (Sumitomo Kinzoku System Kaihatsu Kabushiki Kaisha), 17 December 1993, entire text, all drawings
- Document 8: JP 2002-269402 A (Hino Motors, Ltd.), 20 September 2002, column 8, line 48 to column 9, line 7 and fig. 5
- Document 9: JP 2001-323658 A (Sumitomo Forestry Co.,

Ltd.), 22 November 2001, entire text, all drawings

Claims 1-3, 19 and 21

Document 1 cited in the international search report discloses a design/production supporting system for designing the positions of the equipment in a plant, the piping therefor and the like by means of a three-dimensional CAD system, wherein it is possible to assign a serial number to each individual part and to automatically generate a chart for the parts, which includes the names of the parts, the materials, the dimensions of the parts and the inventory of parts, by means of the method for managing equipment design information that is illustrated in fig. 10.

Claim 4

Document 2 cited in the international search report discloses the feature of calculating the number of standard length straight pipes on the basis of the type of pipe and the diameter thereof that are input, and then determining whether or not the remaining length is shorter than the minimum cut pipe length.

It would be easy for a person skilled in the art to combine the feature disclosed in document 2 with the invention disclosed in document 1.

Claims 5 and 8

Processing devices whereby the CAD data for a three-dimensional structure that is obtained by means of conventional CAD is converted into international standard specification data were well known in the technical field pertaining to CAD at the time of filing, as disclosed in document 3 cited in the international search report.

It would not be difficult to add the well-known

feature disclosed in document 3 to the invention disclosed in document 1.

#### Claim 6

Document 4 cited in the international search report discloses balloons that are assigned to equipment that has been positioned upon a CAD drawing, and indicates determining whether or not an indicated piece of equipment is of the same type as a piece of equipment for which a balloon has already been created, wherein if the device is not of the same type, then a balloon is created in order to accommodate a newly assigned part number.

#### Claim 7

Document 5 cited in the international search report discloses the feature of conducting documentation processes on the basis of integrated data and file data by means of a document creation program.

It would be easy for a person skilled in the art to combine the feature disclosed in document 5 with the invention disclosed in document 1.

#### Claims 9-12, 20 and 22

Document 6, which is newly cited in the international preliminary examination report, discloses the feature of determining numbering conventions on the basis of the different classifications and applications for the equipment. It would not be difficult to add the feature disclosed in document 6 to the invention disclosed in document 1.

#### Claim 13

Document 7 cited in the international search report discloses the feature of creating an estimated cost comparison sheet, like that which is presented in fig. 3,

in order to compare the estimated costs before and after a proposed change.

It would not be difficult to add the features disclosed in documents 6 and 7 to the invention disclosed in document 1.

#### Claim 14

Newly cited document 8 discloses a feature wherein when assigning a number to a part, the part is assigned a repeat number in cases where it is possible to select a similar part from among parts that have been produced in the past. Therein, said similar product corresponds to the "parent part" in the present application.

It would not be difficult to add the features disclosed in documents 6 and 8 to the invention disclosed in document 1.

#### Claims 15 and 16

Document 9 cited in the international search report discloses a method for allocating construction materials, wherein, with consideration of the yield, materials are allocated in order starting with the object that requires the longest material length and subsequent allocations are conducted while making comparisons with the lengths of the left-over materials.

It would not be difficult to add the features disclosed in documents 6 and 9 to the invention disclosed in document 1.

#### Claims 17 and 18

It would not be difficult to add the features disclosed in documents 2 and 6 to the invention disclosed in document 1.